

CHAPTER I

THE HISTORICAL BACKGROUND OF MAGUGU

In 1943 Magugu was a sparsely inhabited area lying a few miles south of Lake Manyara in the Northern Province of Tanganyika (Fig. 1). But for the tsetse fly, Magugu would still be just that. There would still be only a few African families with their small herds of cattle, sheep and goats, and their main worry would be defending those herds from the wild animals that lived in the surrounding bush. Of course, there would still be the fear that the Masai, those proud and cattle-hungry people to the East, might again raid these few Wambugwe tribesmen at Magugu. There would be disease too, but Magugu always had had disease.

Outbreak of sleeping sickness.--Then on the morning of October 22, 1943, an African hospital assistant in charge of the dispensary at Babati, fifteen miles from Magugu, analyzed a blood sample from a fellow African and decided that the blood contained trypanosomes from the tsetse fly (Fig. 1). These parasites in the African's blood stream could mean, in East Africa, only one thing: sleeping sickness. The infected African had come from the Kiru area, adjacent to Magugu (Fig. 1). By December, 1943, it was found that he was the forerunner of thirty more cases from Kiru. Realizing that this was a particularly virulent outbreak of sleeping sickness, technical officers at once surveyed disease conditions

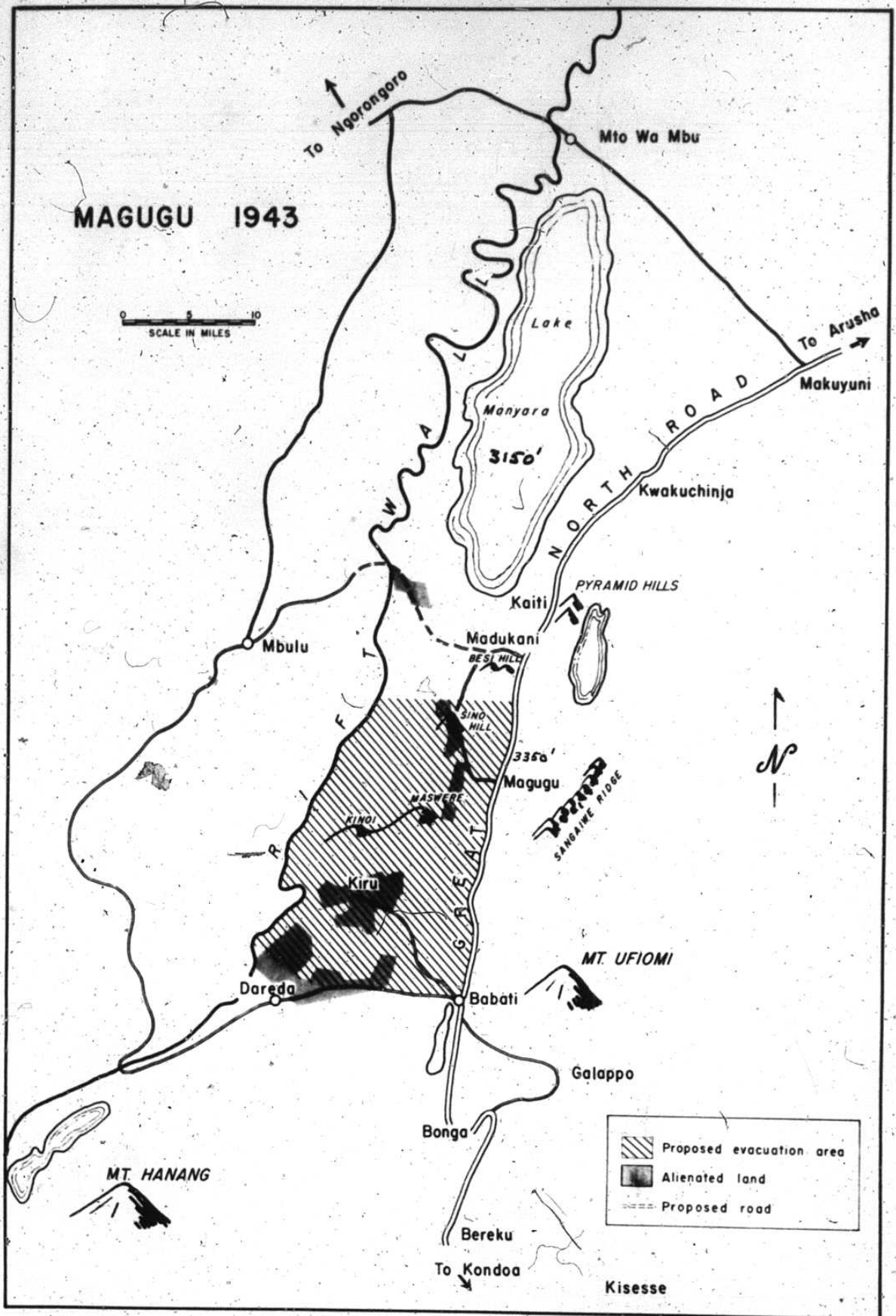


Fig. 1

at Kiru and ordered the immediate evacuation of all Africans. This evacuation began in January, 1944, under the direction of Henry Fosbrooke, Government Sociologist, who was given the new title of "Sleeping Sickness Officer" and empowered to carry out the Government's orders in the matter.¹ From this evacuation was born the idea of a resettlement scheme at Magugu to accommodate these dispossessed Africans. Fosbrooke acted with haste, and in a short time Magugu was carved from the bush to become, eventually, a fertile African agricultural area, with two blocks of alienated estates for non-Africans as well.

The Kiru evacuation.--After the survey of Kiru by medical officers, the District Commissioner at Mbulu, administrative headquarters for the Kiru-Magugu district, issued to all owners of alienated land the following order just two days before Christmas in 1943:²

I am directed by Government to inform you that owing to the Sleeping Sickness infection of the Kiru-Magugu areas of this district, I am to arrange the evacuation of all Africans as soon as practicable from an area bounded as follows:

On the West: By the Rift Wall

On the South: By a line drawn from the Rift Wall along the northern boundaries of Ndareda Estate and Endasago Estate, thence to the Ndareda-Babati Road and eastwards along it to Babati.

On the East: By the Great North Road

On the North: By a line drawn from the Great North Road westward along the northern boundary of Land Office No. 3715 to the Rift Wall (see Fig. 1).

¹The word Government is generally capitalized in East Africa.

²Alienated land is land given to non-Africans by the Government, generally on a leasehold basis.

It will be appreciated if non-natives of the Kiru area will meet me at the house of Mr. A. Miniotis at Kiru at 9.30 a.m. on Monday, December 27, 1943, and if the non-natives of Magugu area will meet me at the house of Mr. G. Combos, Magugu, at 9.30 a.m. on Tuesday, December 28, 1943, so that details involved may be explained.¹

The three European farmers at Kiru, who had well-developed farms, had to depend on Africans for their sole labor supply. It was natural that they did not take kindly to this drastic evacuation move, for it meant loss of their unharvested crops and an abandonment of years of struggle involved in hacking out their fertile estates from virgin bush. Indeed, it meant that they might be faced with actual bankruptcy. Nevertheless, the District Commissioner was firm; he pointed out that it was their financial loss or the loss of many African lives, and therefore the Government had no choice. By March of 1944 when the evacuation of Africans from Kiru was in full swing, the European planters were pleading with the Government to allow them to keep at least enough labor to harvest their crops:

Kiru, 3 March, 1944

Mr. Henry Fosbrooke
Sleeping Sickness Officer
Mbugwe

Dear Sir: Owing to your conversation in a meeting at Babati with six Europeans that there is no compensation to be offered to us...we were obliged to write to the P.C. (Provincial Commissioner) Arusha asking him to send a competent committee to inspect and value our Estates. If this committee is going to be delayed our Estates will be completely ruined and therefore we are obliged to keep our boys in order to have them in good condition as they were allways.²

¹All quotations in this chapter are from unpublished letters and documents in the files of the District Government at Mbulu, Tanganyika.

²Most Europeans in Tanganyika still refer to all their African labor, regardless of age, as "boys".

Further we are in a very desperate condition as we do not know where to go and therefore we wish to ask Government to remain in our estates with each skeleton of boys for six months in order to reap our crops and prepare in the meantime stores and camps in new alienated land. This can be easily done if Government would take a humanitarian feeling towards us who are losing 17 years of hard work and life. Out of 3000 natives in five months time there were about 72 cases of sleeping sickness. If Government would let us keep 180 boys what is the proportion of cases for six months, they will be really very few. This is our views and points and we ask you to forward same to the Provincial Commissioners or H.E. (His Excellency) the Governor.

At the end of August we shall evacuate ourselves our estates, as we all realise the danger and the difficulties that Government has to face in this infected area.

We are Sir,
Yours faithfully,

A. P. Matsis, G. Panyotakis, A. Miniotis¹

The suggestions in this rather alarming letter, if carried out, would have delayed the evacuation to such an extent that, with the coming of the expected rains in mid-March, the whole project might have fallen through, and Fosbrooke hastened to answer the planters:

Mbugwe Mission, 3 March, 1944

To Messers Matsis, Panyotakis, and Miniotis

Gentlemen:

I have the honour to acknowledge your letter of 3/3/44, and will forward your representations as requested. I have, however, received specific instructions from H.E. the Governor that the Kiru evacuation must proceed forthwith and from these instructions I cannot deviate on my

¹ Mbulu Government files. The European farmers at Kiru and Magugu were all of Greek or Cypriot extraction, and hence their letters, undoubtedly authored by Mr. Matsis, their unofficial spokesman, contain some unusual phraseology.

own authority.

2. I explained the system of a skeleton staff: a total gang of 20 bachelor volunteers with one headman to be available for any European requiring assistance in demolishing houses, loading lorries, etc.

3. Your proposals for maintaining skeleton staffs on a larger scale to maintain shambas, reap crops, etc. come rather late in the day.¹ You were first informed of the evacuation on the 24th of December, 1943 and ample time has elapsed in which to make representations.

4. I would further point out that your figures are inaccurate: the native population of Kiru is little over 1,000; over 50 cases have developed in four months. At that rate within a year one would expect 25% of the population to become infected, i.e. of your proposed 180 labourers for six months 22.5 might be expected to develop Sleeping Sickness.²

5. I can fully appreciate your feelings in this matter, but I have the painful duty of carrying out my orders and I am constrained to warn you that obstructing Government officials in the execution of their duty is a serious offence.³

The next day, Fosbrooke wrote in strong terms to the Provincial Commissioner his views on the matter:

...The Kiru planters, led by Mr. Matsis, are obviously out to sabotage the evacuation scheme. A week or two's delay caused by useless petitions will mean that evacuation cannot proceed owing to rain: thus they hope to win their point. To make sure that they do not I propose (unless ordered to the contrary) to proceed to Kiru and camp there till evacuation is complete, and thus counter anti-Government propaganda which I am sure is being spread by the planters amongst their labour.

...it would ease the minds of the planters if the proposed assessment committee be appointed without delay...

¹The word "shamba" is a Swahili term meaning farm, or farmstead.

²It will be noted that the planters minimized the danger and that Fosbrooke's percentage figures are wrong and exaggerated.

³Mbula Government Files.

I do not suggest that such Committee should assess compensation but merely record a picture of the shambas as they find them now before deterioration sets in. There appears some substance in the planters argument that lack of maintenance will reduce the apparent value of the estates.¹

Prior to this exchange of correspondence many meetings had been held between the planters and Government officials. The planters had asked for compensation from the Government. They wanted a promise that their labor forces would be held intact for them until they could start new farms. They had asked for impartial outsiders to come and assess their estates. They had requested the privilege of replacing their Kiru farms with equally good land elsewhere in Tanganyika. The Government countered by appointing the committee, but making no promise that compensation would be forthcoming. As to new farms, the Government offered them land at Magugu, which by now has been decided would be the new resettlement area for the dispossessed Kiruites, both African and Non-African. However, Magugu, with its reputation for disease, and its hotter temperatures occasioned by its lower elevation, did not satisfy the Kiru settlers. The Government, intent upon being humanitarian in saving lives rather than money, failed to support^{ate} the planters' views and Fosbrooke finished the above letter by saying:

Another point that Mr. Matsis is stressing is that, according to him, the Governor promised the Kiru planters that they would be allowed to retain their

¹Ibid.

present labour forces, wherever they set themselves up. This apparently conflicts with what H.E. said at the Mbulu meeting on 17 Feb., 1944, i.e. powers of total conscription. The point would not have arisen if the Kiru people had opted to enter the Magugu scheme. I anticipate that numbers of the labourers concerned--particularly those with wives and families---will voluntarily enter into employment at Magugu, but what about the balance?

A further point is transport of non-natives' personal effects, household goods, salvaged building materials, etc. When the point was raised I replied that had the Kiru people entered the Magugu scheme I had no doubt that they would have received at least equal treatment to that afforded to the natives, i.e. transport of goods and chattels to new farms. In fact I would have been prepared to commence such transport on my own authority, getting confirmation later...From my point of view, the sooner the discontented element is removed from the area, the more smoothly will the clearing and resettlement progress.¹

This series of correspondence represents the usual struggle between the settler and his Government, not only in Tanganyika, but in many parts of the world. The pioneer is a pioneer because he is independent, resourceful and willing to take risks in an alien environment. He resents Government interference of any sort, and surely to the pioneer in Kiru the Government's edict removing all his labor force without definite promise of compensation seemed intolerable. Had the Kiru settlers been a large, wealthy, and well-organized group they might have staved off this disaster with offers of large-scale clearing attempts. Such clearings cost a great deal, however, and the Kiru farmers were forced to abandon some of the finest coffee and paw paw plantations in all East Africa.² After the

¹Ibid.

²In Tanganyika, papaya is generally called paw paw.

survey by the evaluation committee, much correspondence, and a three year delay, the Government finally announced in 1947 that there would be no compensation of any kind to the Kiru farmers. To an elderly farmer such as Mr. Panyotakis, the loss of his farm without any compensation meant that he was forced to throw himself and his family upon public relief, and the Government actually paid the house rent and groceries for his large family after they moved from Kiru to Arusha. Within two years, Panyotakis was dead, and to this day his many sons, who have not been able to accumulate enough capital to acquire land in Tanganyika, have been forced to work for wealthier landowners. His sons will tell you that their father died with a broken heart, and that is probably so. Mr. Matsis and Mr. Miniotis have managed to make a comeback and today are farming not far from Kiru on the newly-cleared Dudumera estates, but the desire to return to Kiru is strong, and in the case of Mr. Matsis is actually an obsession (Fig. 2).

The plan to save Magugu.—When the original outbreak of sleeping sickness occurred, it was found that all the land south of Lake Manyara to the limit of the fly bush north of Babati was infected (see Fig. 1). As a result, the Government decided that the only way to break the contact between man and the fly was complete evacuation of the whole area, including Magugu. Before this was done "a more detailed examination of the fly position showed the possibility of



Fig. 2.--The Kiru Estates. An aerial view taken January, 1954, showing one of the old Kiru Estates on the left and the new Dudumera Estates on the right. Under one of the proposed schemes for reclaiming Kiru, the area in the center of the photo will be cleared. (Photo courtesy of Air Survey Division, Department of Lands and Surveys, Dar es Salaam, Tanganyika). (Note: all aerial photographs in this paper have north at the top of the photograph except Figs. 112 and 113 which have north at the bottom of the photograph. Scale of all aerial photographs other than Fig. 113 is 1:60,000).

eradicating the fly in the Magugu or northern half of the area".¹ This plan would permit the saving of the existing European farms at Magugu, make available additional land for the dispossessed Europeans from Kiru, and provide land for alien Africans, as well as give an expansion area to the Wambugwe who had been steadily retreating over the years from bush and tsetse fly encroachment. This plan was given support by the Government; this resettlement scheme created present-day Magugu.

To accomplish the task of moving from Kiru the African population which numbered 1,372 (of which 550 were women and children) as well as the Europeans (which included a mere dozen women and children and three proprietors) and the possessions of both groups was a major task in logistics. Trucks had to be found and hired; a quarantine camp had to be set up in Babati (along with feeding and housing facilities for the Africans); buildings had to be demolished and everything of value packed for shipping; labor camps at Magugu had to be built to house the Africans who were willing to help set up the Magugu scheme; and finally health measures were required so that a minimum of people became infected while Magugu was being cleared. In addition, transportation had to be provided for any alien African who wished to return to his tribal home

¹Annual Reports of the Provincial Commissioners for 1943 (Dar es Salaam: Government Printer, 1944), p. 51.

rather than move to Magugu.¹

As anticipated by officials, the tsetse fly in the immediate Magugu area, formerly uninfected, soon became infected with sleeping sickness. The first cases occurred along the Great North Road, not only among the evacuees, but also in the highway construction camp at Mbugwe, just north of Magugu. Because of this early outbreak along only the highway it seems highly likely that the spread of the disease was caused by infected flies carried on trucks, rather than by infected persons passing through the quarantine undetected. A temporary treatment center was immediately built to care for these Magugu cases. The figures of sleeping sickness cases, from the beginning of the outbreak till the end of 1944, were:

Treated at Babati, 1943.....	26 cases
Treated at Babati, 1944.....	157 cases
Treated at Mbugwe, 1944.....	56 cases
Total	239 cases
Deaths.....	252

Of these 239 cases health officers decided, after taking patients' histories, that 173 were the result of the original

¹Only this past year (1954) a very old African woman complained to the District Commissioner when he was in Magugu, that the Government had given her only enough money to get part way home, and hence she had returned to Magugu to get the remainder of her fare. She had been waiting ten years to catch the District Commissioner to register this complaint, a complaint whose authenticity was backed up by the elders of the village. Needless to say, the District Commissioner promised immediate action.

²Mbulu Government Files.

Kiru outbreak, and sixty-six were the result of the spreading of the epidemic into Magugu and north to Mbugwe. Ever since 1944, there has been an occasional case of sleeping sickness at Magugu, but nothing like the Kiru epidemic has happened since. With increasing knowledge being made available through research, it is presumed that such an outbreak will not again occur.

The first public works.--Upon the arrival of the Kiru evacuees at the temporary labor camps in Magugu, there now remained the monumental task of clearing Magugu and fortifying its perimeter against the spread of the tsetse fly. Before beginning the clearing process certain fundamental works had to be constructed. Living quarters had to be found for the sleeping sickness officers who were to supervise the project, and this was accomplished first by using the Catholic Mission at Mbugwe along with the Mbugwe Rest House after the latter had been thoroughly rehabilitated (Fig. 3). Later, when time permitted, a Government rest house and cook house were built in Magugu itself, so that officials could be right at the scene of action (Figs. 4 and 5).¹ There was a need for building and improving the roads in the area; wild animal paths, which had sufficed for the few Africans at Magugu, were not adequate for the needs of a clearing operation. Hence, Fosbrooke laid out roads, had them graded with local materials

¹It should be explained that a rest house is merely a hut built by the Government to save officials the trouble of pitching a tent. There are no European hotels in this area.



Fig. 3.--The Catholic Mission at Mbugwe. This was the temporary headquarters for the officials conducting the Magugu Clearance scheme.



Fig. 4.--The Rest Camp at Magugu. It was built in 1943 as permanent headquarters for the clearance scheme. During a storm in 1954, the large shade tree was blown down.

(which were inadequate, and since nothing has been done to these roads since that time, they are in very miserable shape), and built a system of small bridges that still serves the area today.¹ The lack of any kind of a water supply was solved by a temporary two-mile ditch that brought water to the settlement area from an existing European-built ditch. All these public works not only served Magugu, but they also benefited the Public Works Department (PWD) of the Provincial Government as well.² Not only was the PWD spared the expense and trouble of constructing these facilities, but the PWD highway crews working on the Great North Road used the new Magugu roads as well as the water supply. Repeated appeals were made by Fosbrooke for aid from the PWD either in the construction of public works or in the clearing work itself, especially that portion surrounding the PWD camps along the highway. Not only did the PWD fail to cooperate in any way, but instead sent complaints to headquarters that as a result of the clearing operation trees had fallen across PWD drains. The PWD demanded that such trees be removed and that such practices must cease. To the end, though, the PWD continued to use all public works built by the Magugu clearing group.

¹Not only have the roads of Magugu been neglected since their original construction, the bridges are also in such bad shape that before crossing them one sometimes has to rearrange the loose boards so a vehicle will not fall through.

²The Public Works Department in Tanganyika is generally referred to as the PWD.

At the same time that the public works program was active, a preliminary survey was carried out by the Government water engineer for a properly aligned furrow to serve as a domestic water supply as well as for irrigation purposes. With these temporary facilities established, work was then begun on the permanent structures that would be needed for the future Magugu community. A burnt brick dispensary with quarters for a hospital assistant and accommodations for patients was built (Fig. 6). A court house, market, jail, and quarters for a Native Authority administrative staff were also constructed (Figs. 7 and 8).¹

The 1944 clearing of Magugu.--After these preliminary public works were completed, all energies were turned toward the actual clearing of Magugu (Fig. 9). This work began toward the end of March, 1944, even before the last evacuees had arrived from Kiru. In addition to the Kiru evacuees, the European farmers living at Magugu, having first cleared their own land, cooperated in the scheme by hiring out their labor forces for work on the governmental clearing. Additional labor was obtained from the Mbugwe tribe to the north (which numbered about two thousand men) when they were drafted to help with the project, and about one thousand five hundred Wambugwe men were enrolled on a "four-days-on, four-days-off" basis.² From all these

¹In Tanganyika, Native Authority is a proper noun and, like the word Government, is generally capitalized.

²The plural of Mbugwe is Wambugwe.



Fig. 5.--The two-roomed cook house at the Rest Camp. One room comprises living quarters for African employees. In the background can be seen a herd of cattle being driven along the Great North Road.

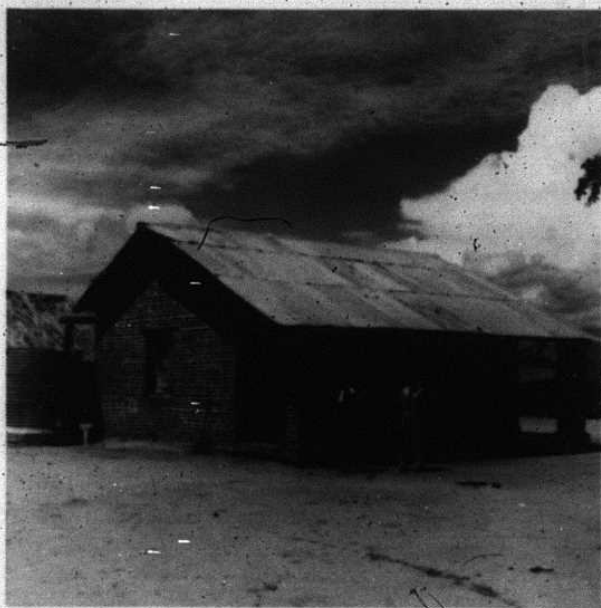


Fig. 6.--The medical dispensary at Magugu. On the right is the medical technician. The dispensary's only source of water is the catchment tank on the left.



Fig. 7.--The Court House and Baraza (Public Meeting House).



Fig. 8.--The colorful garb of a woman of Magugu. In the background are Government-built structures. To the left is the rear of the public market; the center rear is the dispensary; the thatched building is the old jail; and to the far right is the Court House and Baraza.

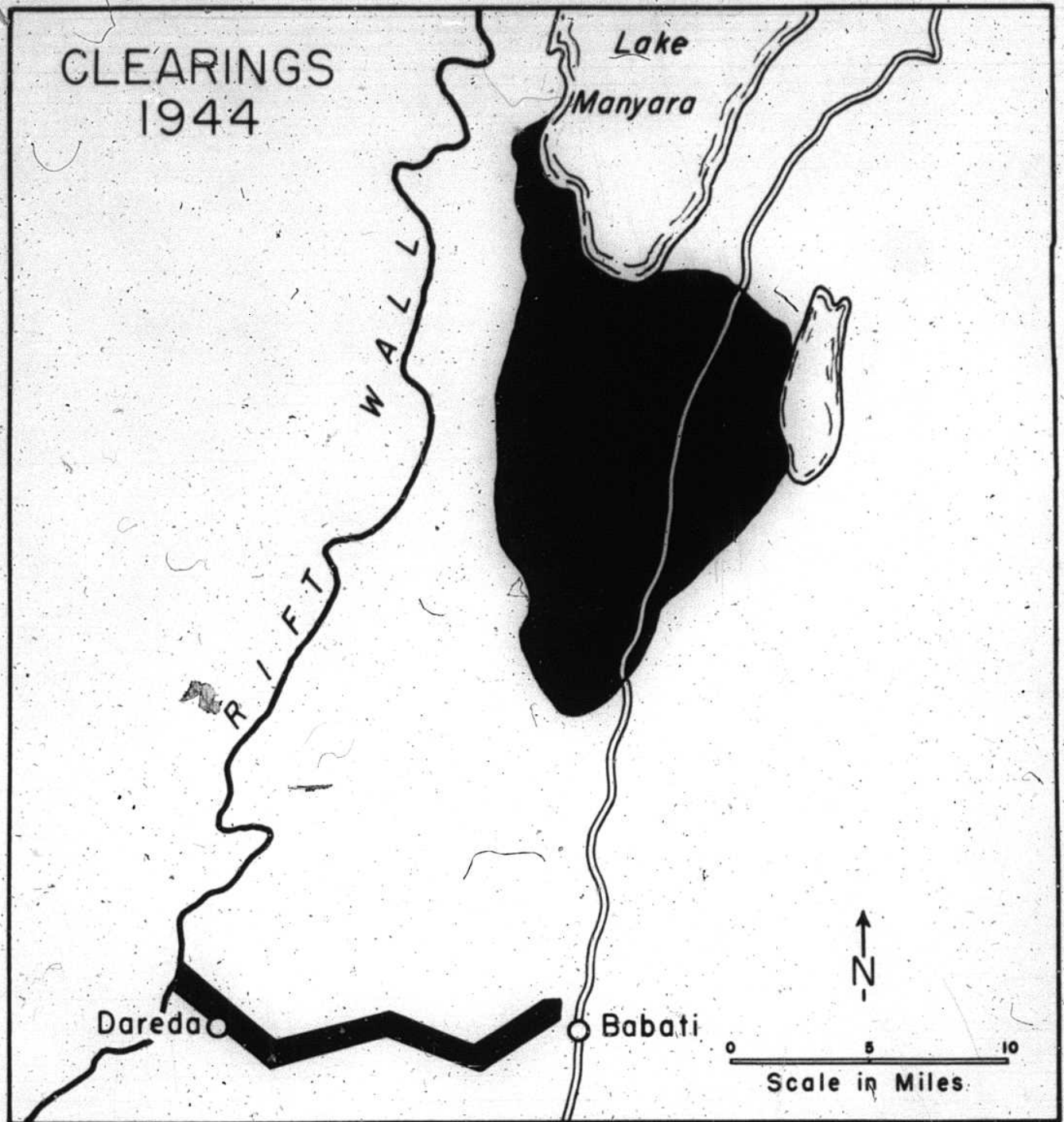


Fig. 9

sources the daily turnout reached a maximum of one thousand six hundred men.¹ This labor force cleared the area entirely by hand, for although the Government examined the possibility of using machinery, it was found that the expense of such a method nullified the advantages that might have accrued had machines been used.

At the same time that the Magugu clearing was being carried out, neighboring tribes to the south around Babati were engaged in clearing operations to safeguard their region. Nearly fifty-seven thousand man-days of unpaid communal work were carried out by the Gorowa (Ufiome) and Iraqw tribes who directed their main efforts to the prevention of the spread of the fly to the south and southeast of the infected Kiru area. To this day, the area to the south of Kiru has been kept free of fly only through the vigilance and hard work of these same tribes.

Kiru still remains an area of high fly content, still unreclaimed, and though today one can count the coffee trees remaining on the old estates, the passage of a few more years will find Kiru returned to bush again (Fig. 10). Ever since the evacuation of 1944 there has been nearly a yearly "scheme" to reclaim Kiru. It has been suggested that the problem be attacked on a broad front from the north; as a narrow salient from the east; as a cleared central block with a fly-free "corridor" into it; and finally clearing all the area from

¹Annual Reports, 1944 (Dar es Salaam: Government Printer, 1945), pp. 61-2).



Fig. 10.--An aerial photograph of the Kiru area, January 19, 1954. The dark area on the left is the coffee estate of Mr. Panyotakis. Other estates can still be seen, and the trees can be counted, but soon all these estates will revert to bush. (Photo courtesy of Air Survey Division, Department of Lands and Surveys, Dar es Salaam, Tanganyika).

the Dareda Ridge straight through to Magugu (Fig. 11). Objections are always raised. As a result, Kiru remains a focus of infection ready to spread outward, and it is kept contained only through continual brush clearing on its perimeters.

Fortunately for Magugu, the tsetse fly seldom wanders over four hundred yards into cleared land away from its needed shade; fortunately the Government is still rigidly enforcing its ban on entering the Kiru area so that infected flies cannot pass on their infection to humans; and fortunately land pressure has not become so great that man will defy the ban in search of farmland. But unfortunately for Magugu, some Africans do not understand the ban and wander into Kiru for wild honey, to hunt, and to get wood. Equally unfortunate is the fact that wild game is not a respecter of Government bans. Hence, an occasional human enters, unknowingly contacts sleeping sickness and spreads the disease to uninfected areas. Wild animals in turn contact the disease, wander north and south through the Rift Valley, and as carriers of human sleeping sickness do their damage in spreading the disease. As long as Kiru remains, an uneasy peace regarding sleeping sickness hangs over Magugu, and the time must come soon when this focus of infection is wiped out.

However, the immediate problem in 1944 was to safeguard Magugu not only to protect the nearby alienated farms, totaling five thousand three hundred acres, but also to provide a home for any alien African who wanted to settle there.

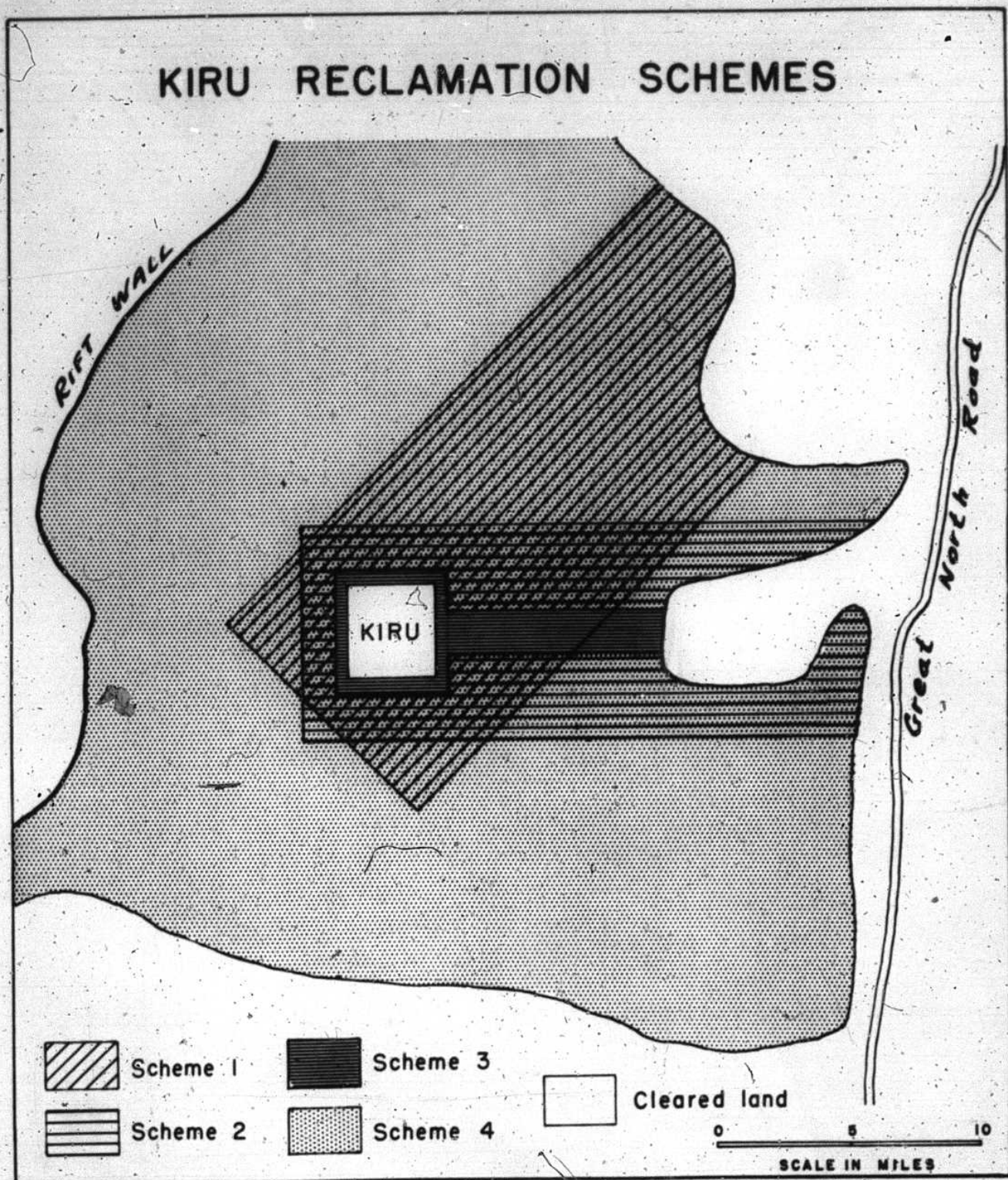


Fig. 11

The original estimates of the cost of the project, that of £12,750, had been approved by the Colonial Development Fund.¹ Kiru had been evacuated, and all the fundamental initial public works had been completed. The European farmers of Magugu had enthusiastically endorsed the clearing measure to such an extent that they drew up a formal document which they presented to the proper officials pledging their cooperation and promising to fine themselves voluntarily if they neglected to fulfill any of these promises (see Appendix A).

By the end of June, 1944, nine square miles of bush had been cleared, and with few hitches the clearing went steadily forward. By this time it was essential to begin the planning of additional public works necessary to guarantee the success of the completed project. The first such item

¹The estimate of costs was broken down into the following: (From Mbulu Government Files):

	Pounds	
A. <u>Kiru-Magugu Evacuation.</u>		
1. Payment of labor in Kiru evacuation area	600/-	
2. Quarantine measures, including housing and feeding	1000/-	1,600
B. <u>Magugu Resettlement.</u>		
1. Supervision for six months (1 at £25 per month, 1 at £15 per month, and 1 at £12 10 shillings per month)	315	
2. Labor for clearing (wages and rations) (300,000 man-days at 50 cents)	7,500	
3. Tools (2,000 axes at Shs. 5/- or £500; 2,080 pangas at Shs. 2/50 or £260)	760	
4. Construction of furrow	500	
5. Improvement to road of access	100	
6. Food for women and children	300	
7. Transport	600	
8. Contingencies	1,075	11,150
Total		12,750

considered was the erection of fly chambers on the Great North Road.¹ These chambers were to act as cleansing sheds for all vehicular traffic, for the tsetse fly is tenacious enough to stick to vehicles for many miles, and hence it was feared that infected flies would be carried from the non-cleared areas to Magugu.

About three-fourths of the original clearing scheme were completed by the end of August, 1944, and by the end of October of that year, the original scheme was practically completed (see Fig. 9). In addition, all alienated land had been cleared. Additional clearings, not originally anticipated, had also been completed in order to safeguard more adequately the original cleared areas. These additions included undercutting Xanthopholea to the west of the European farms, clearing the Kisangji area west of Sino Hill, and clearing beyond the Dudumera River. One job originally thought necessary but not yet undertaken at this time was the undercutting of the acacia forest on "Sino Island". Because there was only a mild infestation of G. palidipes, a species of tsetse, at Sino there appeared no danger from the sleeping sickness point of view in leaving this bush for future work. Hence, by the end of October only two large works, the Kaiti defense line and cleansing chamber in the north, and the Burungi "pencil" remained undone.² There was just enough

¹Fly or cleansing chambers refer to sheds built along highways into which all vehicular traffic must pass. Here all stray tsetse flies are removed, and the vehicle is thoroughly sprayed.

²The Burungi "pencil" refers to a narrow elongated piece of land that was cleared near Lake Burungi (see Fig. 69).

money left from the initial appropriation to complete the Kaiti clearing, but the Burungi clearing and the Kaiti cleansing chamber required £1,200 more money, and it was necessary to apply for further funds from the Government.

Assistance to Africans.--While the clearing work proceeded in the latter part of 1944 beginnings were being made in helping set up the Africans on their newly acquired farms. By the end of August the Government at the request of Fosbrooke had provided a wide variety of seeds for the African to plant and with which to experiment. These included sweet potatoes, cabbage, spinach, carrots, lettuce, beets, tomatoes, egg plant, cowpeas, millet, kunde (native beans), karanga (peanuts), choroko (beans), rice and cassava. Many of the crops proved unsatisfactory for Magugu, but others are still grown with great success. At the same time the Government sent in game scouts to shoot the excess game that would prove both dangerous to man and destructive to crops. By the end of 1944 the scouts had shot 427 animals, including elephant, buffalo, rhinoceros, zebras, wildebeest, and hartebeest. The killing of game was carried out also as a protective measure in the spread of sleeping sickness, for there was no known method of preventing the game from wandering from the infected fly areas into the newly cleared Magugu area (Fig. 12).

The trading settlement.--There was also the matter of laying out a new trading settlement at Magugu. Early in



Fig. 12.--Wild game still wanders into the Magugu settlement area. This buffalo was shot near Sino Estate in March, 1954.

March, 1944, Fosbrooke was writing to the Land Officer at Dar es Salaam requesting permission to survey plots for sale to traders. Upon receiving this permission the area bordering the Great North Road and the Magugu turnoff was surveyed, and on May 1, 1944, Mbugwe, Babati and other surrounding towns blossomed forth with these signs:

REMINDER

Remember the sale of 6 Trading Plots at Magugu on May 3rd 10 a.m. Auction to be held on the spot. Here is an opportunity to open a new branch: there are thousands of customers waiting for you!¹

The auction was held, five of the offered plots were sold to Asians, and one was purchased by one of the Greek farmers living at Magugu. Rent varied on the plots according to location, and prices charged by the Government ranged from an annual rent of eighty-five shillings to two hundred thirty shillings. In a short time shops were built, goods shipped in, and trading commenced (Figs. 13, 14, 15, 16 and 17).

Once Magugu began to take shape it was necessary to set up a Native Authority to handle local governmental affairs. Though Magugu was part of the old Mbugwe Chiefdom

¹By necessity this sign also appeared in Swahili, since many of the potential buyers could not read English. Hence, one could also find the following: "UKUMBUSHO: Kumbuka mnada wa Viwanja 6 Magugu tarekh 3/5/44 saa nne, vitanadiwa pale pale Kibaoni. Hapo ni nafasi kufungua duka mpya: watu elfu na elfu wanakungoja." X

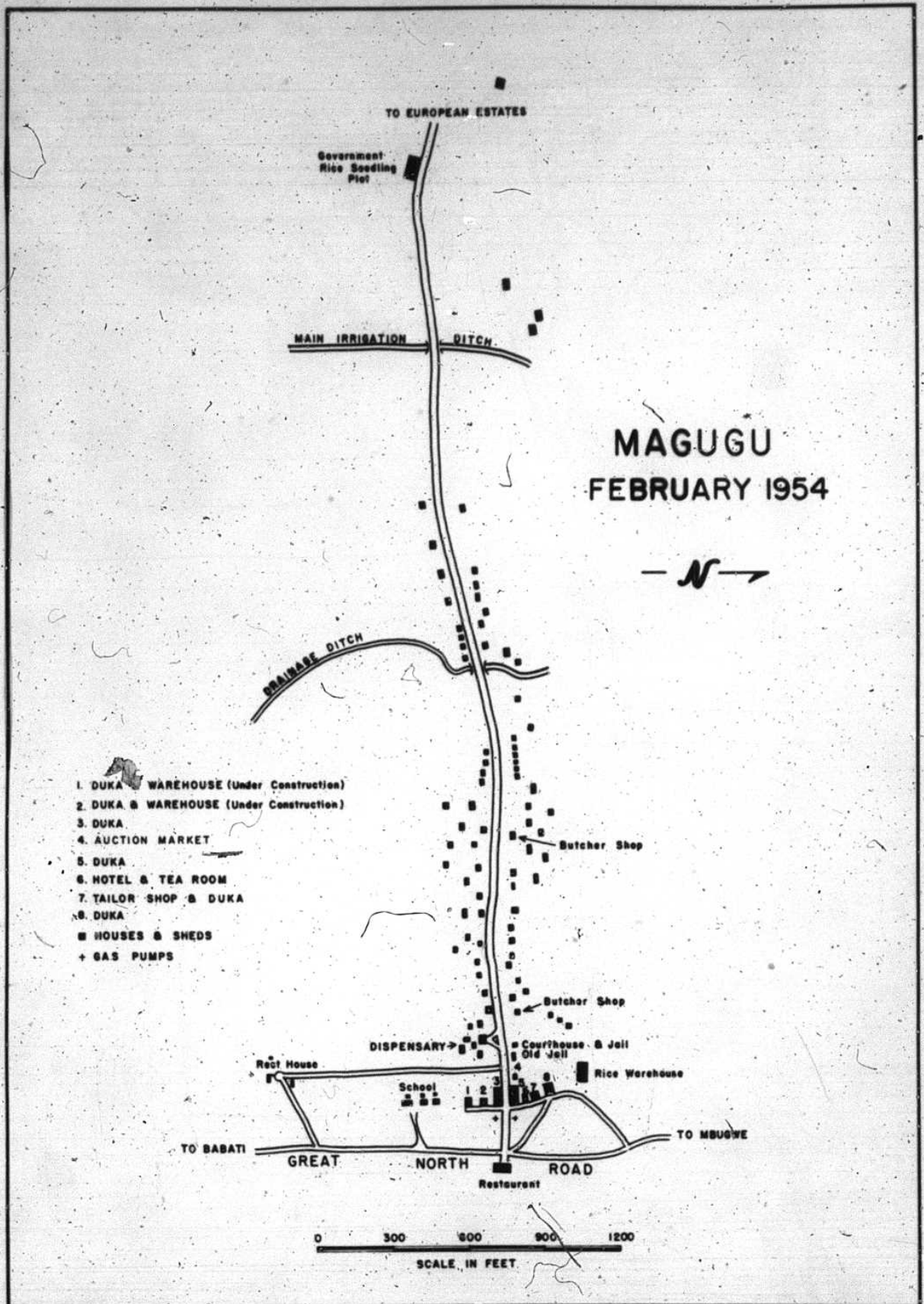


Fig. 13

TO EUROPEAN ESTATES

Government
Rice Seedling
Plot

MAIN IRRIGATION

DITCH

MAGUGU FEBRUARY 1954



DRAINAGE DITCH

- 1. DUKA & WAREHOUSE (Under Construction)
- 2. DUKA & WAREHOUSE (Under Construction)
- 3. DUKA
- 4. AUCTION MARKET
- 5. DUKA
- 6. HOTEL & TEA ROOM
- 7. TAILOR SHOP & DUKA
- 8. DUKA
- HOUSES & SHEDS
- + GAS PUMPS

Butcher Shop

Butcher Shop

DISPENSARY

Courthouse & Jail
Old Jail

Rice Warehouse

Rest House

School

1 2 3

TO BABATI

GREAT

NORTH

ROAD

TO MBUGWE

Restaurant

0 300 600 900 1200

SCALE IN FEET



Fig. 14.--A view of the trading settlement as seen from the Great North Road. The Rift Wall is to the northeast in the background.



Fig. 15.--The main Asian duka at Magugu. The sign proclaims that Pepsi-Cola is sold even in Magugu.



Fig. 16.--The shop, or duka, of another Asian trader. The walls and roof are adobe, and it has a dirt floor.



Fig. 17.--Another duka at Magugu. On the front veranda tea and cakes are sold.

it was felt that the introduction of many aliens to the area would cause difficulty if they were subjected to the Government of one tribe. Hence, a subordinate Native Authority was created. A Jumbe, or village headman, was appointed, and a court and tax collection center was set up. The Native Authority in turn established a market along the Great North Road for the sale of cups of tea, bananas, sugar cane, cakes, and other food items. This small market continues to function and provides a source of income to the local people as well as the first convenient stopping place for travelers from Arusha, nearly one hundred miles away (Fig. 18).

Once the Asian traders became established and the Africans in the food market began to show small profits, other Africans began to set up small enterprises in Magugu.¹ A butcher shop was established and proved so successful that soon a rival shop was set up in competition (Fig. 19). This proved so ruinous to the butchers that they mutually agreed to stay open only on certain days of the week. As a result they still share the business by each staying open two days and then shutting down for two. Along with such minor businesses as individual tea stalls, a small and primitive hotel, and traders in local produce, various artisans established themselves and started making furniture, shoes, brooms and

¹This was a slow process spread over the years and is still going on today (Figs. 22 and 23).



Fig. 18.--The restaurant along the Great North Road. Tea and food are sold here to travelers as well as the local populace. On the right sugar cane is propped against the building.



Fig. 19.--The most prominent butcher shop at Magugu. Filet mignon sells here for ten cents a pound.

brushes, mats and rugs, wood carvings, and ceremonial paraphanelia such as drums and headdresses (Figs. 20 and 21). They also became semi-skilled in building huts and thatching roofs.

Hence, by the end of 1944 Magugu had become an established community. The pre-existing farms of the Europeans at Magugu had been saved by the new clearing scheme, and as a result five thousand three hundred acres of rich alienated land were preserved to contribute to the food supply of Tanganyika. The evacuated Africans from Kiru had been provided with new lands conveniently close to their old holdings at Kiru. Seeds, the loan of tools, free food, tax exemption, and technical assistance made the transition from Kiru much easier, and certainly many needed this assistance, for they were changing their lives from one of being laborers on European estates to that of independent operators. A trading center had been created, a Native Authority set up, public works constructed, a temporary water supply provided, and facilities for adequate health measures to protect the present population as well as the expected influx of newcomers. Equally important was the fact that the Wambugwe to the north could now cease their disheartening retreat from the tsetse. But Magugu still had a long way to go before it became a self-contained unit safe against tsetse and sleeping sickness encroachment.

Continued clearings in 1945.--With the coming of 1945



Fig. 20.--The first hotel built at Magugu and now abandoned.



Fig. 21.--Africans standing in front of the present Magugu hotel.



Fig. 22.--A warehouse built in Magugu to store cotton. Since cotton is no longer raised, this building is little used.



Fig. 23.--The Magugu Rice and Flour Mills. This is an Asian enterprise devoted to grinding or hulling corn and rice. It is owned and operated by the same Asian who operates the duka shown in Fig. 17.

plans were proposed to the Government for continued work at Magugu to safeguard the new community. The aim of these plans was to utilize all available natural features to safeguard the whole Mbugwe-Magugu area against any future danger of tsetse infiltration. In order to accomplish this end it was proposed that additional clearings on the perimeter of the 1944 clearings be expanded (Fig. 24). An expansion policy in various directions where it was felt danger still lie was also proposed. Clearing work, suspended during the planting season, was resumed in March. Only local labor was employed, and the daily turn out averaged between four and five hundred. These new clearings included an expansion on the south side of the Dudumera River, an extension of the barrier eastwards from the Matufa cleansing chamber, the tackling of the Burungi pencil which up to this point had formed a dangerous salient between the area cleared and the Burungi mbuga, and the straightening of the Kaiti bush margin (Fig. 24).¹

Two needed public works, proposed for the year, included de-flying sheds, or cleansing chambers, both at Matufa

¹An mbuga is a swampy plain or valley floor usually composed of impermeable soil. Such plains are covered with tall grass. In the dry season the soil cracks and the swamps are reduced to threads running down the middle. After heavy rains they expand and may become impassable.

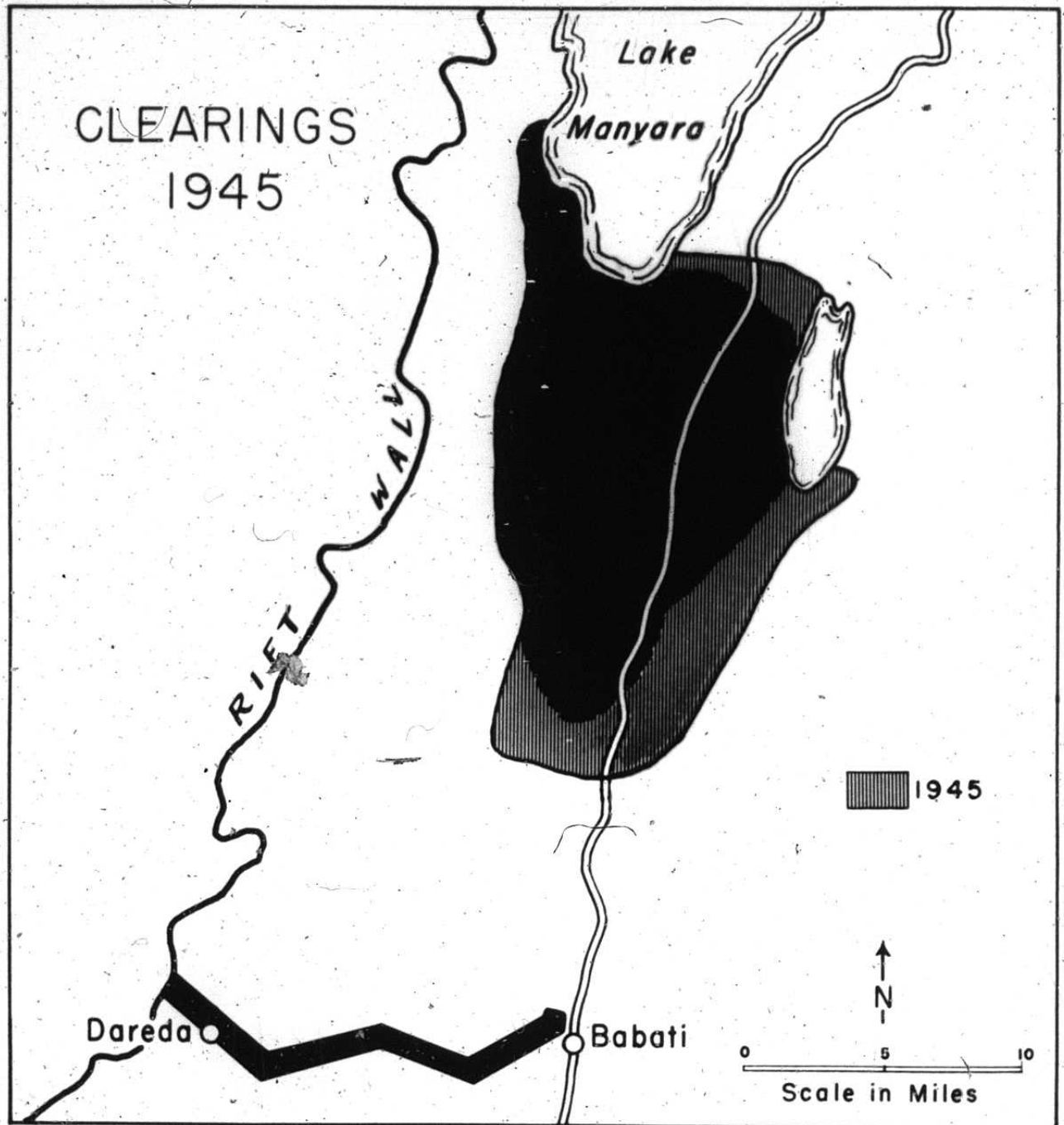


Fig. 24

and Kaiti. Most of these projects were completed by the end of 1945 (Figs. 25, 26 and 27). The Matufa extension, which was originally designed so that no bush should remain within eight hundred yards of the cleansing chamber, had to be expanded when the Public Works Department realigned the Great North Road further eastwards. Similarly the Burungi pencil operation was estimated to cover only three square miles, but nearly twice that amount was cleared.

With the completion of these works, there still remained the problem of what to do with (1) the Mbesi Forest, (2) the Sino problem, and (3) the slashing of regeneration along the perimeter of the whole project. Also about thirty Africans remained at Kwakuchinja which was now known to be infected, and their removal was delayed only to allow them time to harvest their crops. Eventually the Mbesi Forest was cleared so as not to leave any "islands" within the area in which the tsetse fly might establish itself, and after much discussion and delay, the Sino area was treated in the same way.

Hence, by October, 1945, nearly all the major clearing works were completed. African settlement was becoming more firmly established with the erection of permanent dwellings to replace the temporary grass huts in which the evacuees were first housed (Figs. 28, 29, 30, and 31). The work on the important irrigation ditch had begun. About seven miles of this ditch were completed and were carrying water from a temporary intake while the proper intake, involving a fourteen



Fig. 25.--Fly post sign. This sign along the Great North Road warns the motorist that he must go through a tsetse cleansing chamber before entering the Magugu clearing.

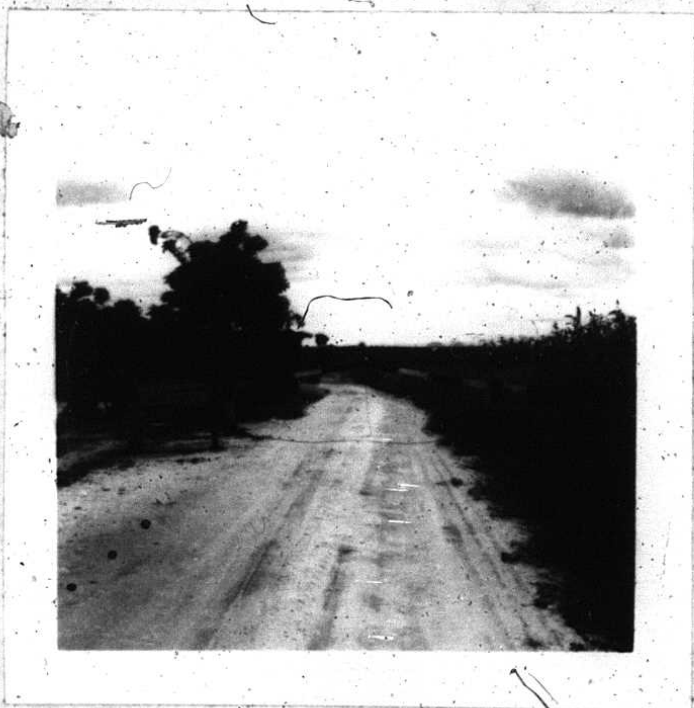


Fig. 26.--Fly post barricade. The roads into Magugu are barred to all vehicular traffic until it has gone through the cleansing chamber.



Fig. 27.--A tsetse cleansing chamber. The chamber, partially hidden by the vegetation, is a large building capable of handling any size of vehicle. After the doors are closed the vehicle is sprayed with a chemical and the flies are removed with small nets. Hanging on both sides of the sign are the nets used for this purpose. To the right is the Great North Road.



Fig. 28.--Magugu homes. Some of the substantial homes that replaced the temporary grass huts of the evacuees.



Fig. 29.--An unfinished home. Some settlers tried to build too well and too large. This adobe brick house was started a number of years ago but never finished.



Fig. 30.--The main residential street in Magugu.



Fig. 31.--Homes on the Magugu-Sino road. Behind such well-made houses as these can still be found the original temporary dwellings. Often these temporary huts are used as cook houses, storage sheds, or animal shelters.

foot cut, concrete walls and flood-proof gates, was under construction (Figs. 32 and 33).

Clearings in 1946.--Within the orbit of the clearing scheme sleeping sickness now seemed to be under apparent control, but later in the year a marked increase in the number of new cases in the area indicated the probability that new foci of disease had been established. Hence, proposals for additional defense work were submitted to the Government, and an appropriation of £25,000 was approved for 1946 to accomplish this work. These new works included clearing on both sides of the Great North Road from Magugu to Bonga, an attempt to save the Galappo area and an extension of the Bonga anti-fly corridor to Kisesse (see Fig. 1). The plan also included a substantial inroad into the northern flank of Kiru along the Kilongose River which would make available some five or six farms for Non-African settlement (Fig. 34). It will be noted that many of these proposals involved areas considerably removed from Magugu, yet some of them were integral parts of the Magugu proposals, because the necessity of clearing the Great North Road to prevent infection entering from the south, plus the Kilongose clearings to give a permanent southern boundary to the Magugu area, were necessary if Magugu were to survive over the years. With the passing of time the Kilongose clearings became the nucleus for the present Dudumera Estates. These estates provide the Government with one of its many positions from which it might



Fig. 32.--The beginning of the main irrigation ditch as it leaves the Dudumera River. Vegetation clogs the ditch here as it does in many places along its route.



Fig. 33.--The concrete intake of the main irrigation ditch. The black rod to the right of the concrete wall is used for regulating a trap door which controls the amount of water admitted into the ditch.

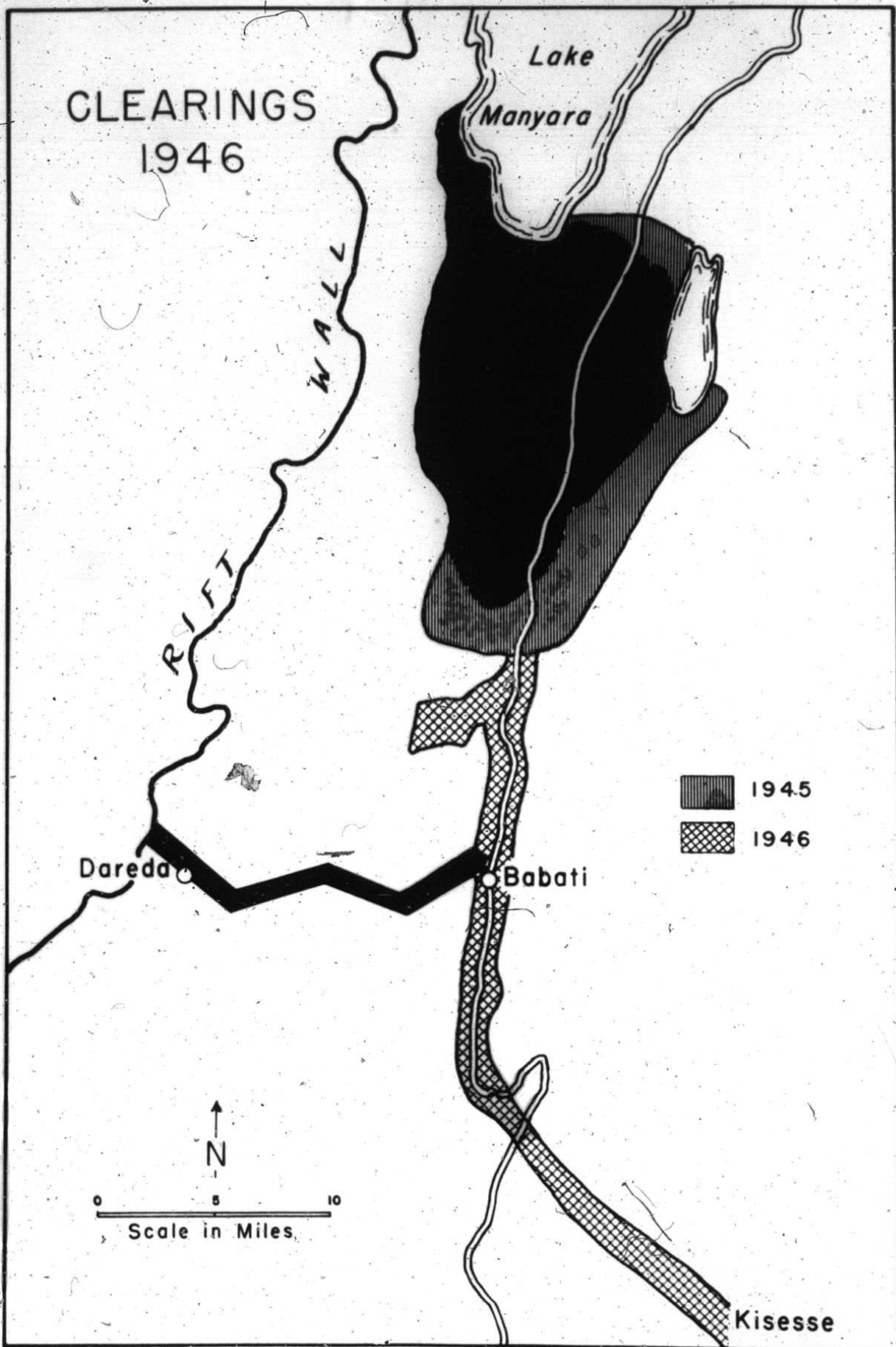


Fig. 34

eventually attempt to reclaim the old Kiru estates, for Dudumera at its westernmost extent is getting close to the first of the abandoned Kiru estates.

By the end of 1946 all the above works were completed (see Fig. 34). Because of delays and lack of time the felled trees were not cut up and piled. Therefore, it was decided to complete this work in 1947 to insure that the area was completely cleared. While all the clearing activity in the Magugu-Mbugwe-Babati area was going on, the stock route along the Great North Road through this area was closed in order to eliminate the possibility of animals picking up flies along the way and thus bringing infection. This caused much inconvenience to shippers who had driven their cattle along this route to the Arusha market. However, means were worked out to drive cattle via Mbulu which meant (1) over a hundred miles' longer drive than through Magugu, (2) a corresponding decrease in weight of the animals, and (3) larger labor costs in hiring drivers to care for the herds. Because of the economic importance to the Northern Province of this Arusha cattle market, the clearings to Babati through to Bonga and Galappo were designed to permit the reopening of this route as soon as possible. Today thousands of head of cattle again pass through Magugu weekly on their way north (Figs. 35 and 36):

Restrictive clauses in European leases.--The extension of the clearings southward to Bonga and Galappo made



Fig. 35.--The cattle route. One of the huge herds of cattle being driven through Magugu on the way to northern markets (January, 1954).



Fig. 36.--Cattle on Great North Road. Another herd of cattle being driven on the Great North Road through Magugu. In the background is Sangaiwe Ridge (January, 1954).

farmers in these areas more conscious of the tsetse problem. These farmers feared that if sleeping sickness broke out on their farms they would have to evacuate their holdings as had happened at Kiru. Consequently some of them asked to exchange their holdings for safe tsetse-free land where they would be in blocks of settlement rather than on isolated farms as many were.

One such farmer in 1946 exchanged his farm on Mt. Ufiome for land at Dareda. Such an exchange, with a ninety-five year lease, shows well the Government's increasing skill in dealing with alienation in such a manner that sleeping sickness would not be a current or future problem. The new leases contained provisions (1) requiring extensive clearings of the whole farm, (2) the denial of the right to build any human dwellings within four hundred yards of uncleared tsetse-infested land, and (3) a strict requirement that the farmer not only would prevent soil erosion of his own land but would also farm in such a manner that it would not cause erosional damages to his neighbors.¹

As these provisions are gradually being incorporated into all leases given out by the Government, they should become effective measures in holding the line against sleeping

¹An unpublished copy of this lease, entitled "Terms and Conditions For Dudumera Farms", can be found in the files of the District Government at Mbulu.

sickness, because in the past the European farmer was one of the great offenders in causing the spread of sleeping sickness. In the past, the European generally would clear only part of the land granted to him and then he would wait for money to enable him to finish clearing the remainder. In the meantime, however, the tsetse fly often became infected in the uncleared portions, would spread, and in some cases cause abandonment of the entire farm. Some of the old original leases still in effect permit such conditions, and under the present laws there seems to be nothing that can be done to enforce complete clearing. The old Sino Estate at Magugu is such an estate. It has become largely derelict and the regeneration has reached dangerous proportions, but as the owner continues to occupy the buildings, he fulfills the requirements of his lease by his mere presence and the semi-upkeep of old improvements (Figs. 37 and 38). As a result, Sino Estate is creating within Magugu a condition which might at any time be the cause for another outbreak of sleeping sickness.

The irrigation ditch.--During all the time that the public works were being constructed and the clearing work progressing at Magugu as well as in the adjoining areas, one major problem was slow in being solved. This was the construction of the proposed permanent irrigation ditch from the Dudumera River. Early in 1944 a qualified water engineer, brought to Magugu, made a preliminary survey which indicated that a ditch which would serve most of the area within the



Fig. 37.--Regenerating bush along the Sino-Idulu road. It is feared that this may harbor tsetse flies in the near future.



Fig. 38.--Uncleared vegetation on the old Sino Estate. The "elephant grass" is higher than the automobile.

Magugu triangle, could be constructed. However, in the latter part of that year a decision, reserving the southern part of the triangle for Non-African settlement, made it obvious that the suggested line of the original ditch was unsuitable.

Under the revised plan of settlement the proposed ditch would have been too large and expensive for the African settlement around Magugu, but on the other hand it would serve too small an area should Non-African settlement go ahead in an extended southward clearing. Hence, it was proposed that a less ambitious scheme be undertaken. This scheme involved the development of the temporary ditch which was only a small branch ditch from an existing planter's ditch and which had been supplying water for the Magugu workers' camp. Consequently by March of 1945 the water engineer had returned to Magugu, made a detailed survey, and pegged where the ditch was to go. This was an important step in the resettlement of the Africans at Magugu, for they had been waiting to find out just where the ditch would go in order to locate their farms more advantageously with respect to a water supply.

In order to avoid running through occupied farms and in a desire to pass specific points enroute the engineer did not peg a grade line but rather laid a more or less direct line from point to point. This entailed deep cuts in places and the construction of masonry drops in the ditch to maintain a reasonable grade. It also ignored somewhat the

quality of land that it would serve, but since up to this time no real soil survey had been made at Magugu, it would have had to be pretty much guess work regarding soil fertility anyway.

Once the ditch was under construction, objections arose as to the wisdom of its location. Because in leaving the Dulu-mera River it had to cross irrigated European estates, there was the problem of crossing and re-crossing existing irrigation ditches. At one time this difficulty led one of the planters to suggest that the Government share this planter's existing ditch. The Government wisely decided that such an arrangement, involving the complicated allocation of upkeep costs and quantities of water to be used by both parties, would lead to nothing but future trouble, and a new line for the ditch was again laid out. This line also crossed many existing ditches, and it was realized that though devices such as moveable flumes might partially solve this problem, such devices would lead to erosion in the banks of the Magugu ditch so that later the flumes would not reach across and eventually prove useless. Hence, a call was made in 1946 for the return of the water engineer for a realignment of parts of the ditch. This was done in such a manner as to follow roughly the boundary of existing farms and hence alleviate the problem of criss-crossing existing ditches. With this new plan receiving acceptance by the sleeping sickness officer, the digging of the permanent ditch went forward (Figs. 39, 40, 41 and 42). In the meantime the Mbugwe tribe to the north now requested that



Fig. 39.--A part of the main irrigation ditch that is well maintained.



Fig. 40.--Untended portion of irrigation ditch. Another section of the ditch where the vegetation has grown so high that the water is not visible. The ditch is the line in the left center of the picture.



Fig. 41.--The Dudumera River at the point where the Magugu irrigation ditch begins. Many hippopotami live in this stream.



Fig. 42.--The irrigation ditch at the point where it leaves the Dudumera River. Note the high banks on each side, the result of a deep cut. The tall grass to the left center is growing in the middle of the ditch.

a branch ditch should be constructed through the new Muhale settlement to Besi hill. Since the Wambugwe had always had a water shortage, this proposal was received favorably. By mid-1946 most of the originally proposed ditch had been completed, and the Government appropriated additional funds to widen the original furrow to get a greater flow of water for the Besi area. In addition it appropriated the money to build the Besi branch ditch of approximately six and one-half miles. These additions and changes required more surveying. With the delay caused by this surveying, along with the non-availability of laborers who had to take care of their own farms, the final work on the present main ditch was not completed until nearly the end of 1947. However, the building of small subsidiary ditches to serve such areas as the northwest part of the Magugu area and the present Matufa area which were not part of the original plan were not immediately considered. Therefore it was late 1949 before the present main ditches of the system were entirely completed and paid for by the Government (Figs. 43 and 44). Subsequent additions to this system have been dug by the farmers themselves to serve their own needs as they arise.

Land utilization patterns form.--With the completion of the main irrigation works during 1947-49, along with all the public works and clearing areas that had been completed from 1943 to 1947, there emerged the Magugu settlement which is today essentially the same in area as it was in 1947.



Fig. 43.--A view of the main irrigation ditch. The farmer is standing beside a small subsidiary ditch from which the water is blocked by a trash dam. Erosion has eaten parts of the bank to the right of the sticks.



Fig. 44.--A diversion dam on the main irrigation ditch. Originally there were concrete walls with wooden doors, but they have disappeared through misuse and erosion.

Starting in 1944 the African settlers had begun to drift in, and in 1945-46 they began to consolidate their positions. Few non-Africans had moved into Magugu, but their presence was not necessary for the success of the scheme, and eventually the Government decided against any further alienation of land to non-Africans. By 1948 the pattern of land utilization and resource use by the African settlers was slowly forming, and the development of this pattern continues today.